

Transactions of the All-Union Congress (Cont.)

SOV/6201

(25)

**PURPOSE:** This book is intended for scientific and engineering personnel who are interested in recent work in theoretical and applied mechanics.

**COVERAGE:** The articles included in these transactions are arranged by general subject matter under the following heads: general and applied mechanics (5 papers), fluid mechanics (10 papers), and the mechanics of rigid bodies (8 papers). Besides the organizational personnel of the congress, no personalities are mentioned. Six of the papers in the present collection have no references; the remaining 17 contain approximately 1400 references in Russian, Ukrainian, English, German, Czechoslovak, Rumanian, French, Italian, and Dutch.

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IVANILOV, Yu.P. (Moskva)

Roll waves in an inclined channel. Zhur. vych. nat. i mat.  
fiz. 1 no.6:1061-1076 N-D '61. (MIRA 16:7)

SOURCE: AN SSSR. Izvestiya Mekhanika, no. 1, 1965, 29-33

The equations of motion for the liquid and the boundary conditions are linearized.  
The boundary conditions are linearized at  $\theta = 0$  and  $\psi = 0$ .

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619010005-9

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CIA-RDP86-00513R000619010005-9"

... to establish this stability criterion, solutions for  $\phi$  and  $\theta$  are  
assumed in the form  $f(x)\exp(\sigma t)$  and  $g(x)\exp(\sigma t)$  respectively. A critical

... are indebted to V. G. Sorokin for  
his critique of the work." Orig. art. has: 20 equations and 1 figure.

ASSOCIATION: none

ASSOCIATION: none

Cord 2/3

IVANILOV, Yu.P. (Moskva); PASHININA, L.V. (Moskva)

Stability of long waves in a flow of viscous incompressible fluid.  
Izv. AN SSSR. Mekh. no.1:29-33 Ja-F '65. (MIRA 18:5)







**"APPROVED FOR RELEASE: 08/10/2001**

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**CIA-RDP86-00513R000619010005-9"**

Sturm-Liouville problem. It is found that the above equation (2) has solutions of small amplitude waves on the jet surface with wavelength  $\lambda = 2\pi / k$ . Taking the asymptotic solution of the governing flow equation (see insert 2), the

SOURCE CODE: UR/0040/66/030/004/0768/0773

AUTHOR: Ivanilov, Yu. P. (Moscow); Yakovlev, G. N. (Moscow)

ORG: none

TITLE: On the bifurcation of fluid flow between two rotating cylinders

SOURCE: Prikladnaya matematika i mekhanika, v. 30, no. 4, 1966, 768-773

TOPIC TAGS: Couette flow, secondary flow, rotational flow, flow research

ABSTRACT: The origin of secondary stationary flows in a fluid contained between two cylinders rotating in the same direction is analyzed. A two-dimensional steady flow without pressure gradient in the direction of flow, caused by the tangential movement of the bounding surfaces (Couette flow), has a trivial solution. Upon introducing a linearized system of equations defining stationary axisymmetric flows, some additional boundaries and parameters are formulated. The physical essence of the bifurcation operator is explained and expressed mathematically. Orig. art. has: 24 formulas.

SUB CODE: 20/

SUBM DATE: 10Jan66/

ORIG REF: 008/

OTH REF: 004

Card 1/1

ACC NR: AP7002003

SOURCE CODE: UR/0040/66/030/006/1140/1146

AUTHOR: Ivanilov, Yu. P. (Moscow); Yakovlev, G. N. (Moscow)

ORG: none

TITLE: Steady state convection in the presence of an external magnetic field

SOURCE: Prikladnaya matematika i mekhanika, v. 30, no. 6, 1966, 1140-1146

TOPIC TAGS: convective heat transfer, magnetohydrodynamics, incompressible flow, viscous flow

ABSTRACT: The presence of steady convective flows in a conducting liquid confined in a vessel heated from the bottom is shown analytically for the case when an external magnetic field is present. It is assumed that the density of the liquid is a linear function of the temperature and that the temperature gradient is constant. The steady flow of the liquid is defined by four sets of equations: dynamic equations, equations of heat conductivity, induction equations and equations of incompressibility. These equations contain the following parameters: Rayleigh number, Prandtl number, magnetic Reynolds number, magnetic pressure number, pressure, acceleration due to gravity, external magnetic field intensity and the projection of velocity along the direction of the gravitational force. The variables are dimensionless and are introduced as functions of the following: the kinematic viscosity, the characteristic linear dimen-

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ACC NR: AP7002003

sion, the velocity vector, the vector of magnetic field intensity induced by the motion of the liquid, Cartesian coordinates, coefficient of heat conductivity, specific heat, coefficient of magnetic viscosity, electrical conductivity and magnetic permeability. Boundary conditions are assigned by assuming that the vessel is completely filled and that its wall is a perfect conductor. A generalized solution of the problem is formulated together with the solution of the corresponding linearized steady state problem. Two lemmas and five theorems are proved in the course of the analysis to show the presence of steady convective flows. It is concluded that analogous results can be obtained if the liquid is placed in a dielectric material. Orig. art. has: 26 formulas.

SUB CODE: 20/ SUBM DATE: 10Jan66/ ORIG REF: 012/ OTH REF: 001

Card 2/2

BAKCHISARAYTSKY, Arutyun Nikolayevich; IVANIN, F.D., redaktor; NIKOLAYEV,  
S.V., redaktor; SUCHILIN, A.P., redaktor; SKVORTSOV, V.P., redaktor  
izdatel'stva; SERGEYEVA, N.A., redaktor izdatel'stva; KRYNOCHKINA,  
K.V., tekhnicheskii redaktor

[Organizing and planning geological prospecting] Organizatsiya i  
planirovaniye geologo-razvedochnykh rabot. Pod red. F.D.Ivanina,  
S.V.Nikolaeva. A.P.Suchilina. Moskva, Gos. nauchno-tekhn. izd-vo  
lit-ry po geol. i okhrane nedr, 1956. 283 p. (MIRA 9:8)  
(Geology) (Prospecting)



BAKHCHISARAYTSEV, Arutyun Nikolayevich; KULICHIKHIN, N.I., retsenzent;  
VOYTSEKHOVSKIY, I.V., retsenzent; IVANIN, F.D., retsenzent;  
KOVAL', V.A., retsenzent; CHEREDNIK, P.Ye., retsenzent;  
NIKOLAYEV, S.V., red.; SUCHILIN, A.P., red.; SERGEYEVA, N.A.,  
red. izd-va; GUROVA, O.A., tekhn. red.

[Organization and planning of geological prospecting]Organiza-  
tsiia i planirovanie geologorazvedochnykh rabot. Izd.2., perer.  
Moskva, Gosgeoltekhizdat, 1962. 369 p. (MIRA 16:2)  
(Prospecting)

IVANIN, Ivan Yakovlevich, dotsent, kandidat tekhnicheskikh nauk; ~~HERDICEV-~~  
~~SKII, G.I.~~, kandidat tekhnicheskikh nauk, redaktor; ~~PERSON, M.N.~~,  
tekhnicheskikh redaktor

[Determining the stress of roof trusses] Opreделение usilii v  
stropil'nykh fermakh; spravochnoe posobie. Moskva, Gos. izd-vo  
lit-ry po stroitel'stvu i arkhitekture, 1955. 126 p. (MLRA 8:6)  
(Trusses) (Roofs)

PHASE I BOOK EXPLOITATION 1191

Ivanin, Ivan Yakovlevich, Candidate of Technical Sciences

Primery proyektirovaniya i rascheta derevyannykh konstruktsiy  
(Examples of the Design and Analysis of ~~Wooden Structures~~)  
Moscow, Gosstroyizdat, 1957. 223 p. 20,000 copies printed.

Reviewer: Pischikov, V.G., Candidate of Technical Sciences;  
Scientific Ed.: Zaytsev, S.M.; Eds of Publishing House:  
Tumarkin, D.M., Borodina, I.S.; Tech. Ed.: Guseva, S.S.

PURPOSE: This book was authorized by the Ministry of Higher Education of the USSR as a textbook for special courses in construction at institutions of higher learning, and may also serve as a practical manual for engineers and designers, and manufacturers.

COVERAGE: The book considers examples of design and calculation of modern wooden structures according to calculated limiting

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Examples of the Design and Analysis (Cont.)

1191

conditions. All calculation examples for elements which do not carry loads (fencing, for instance) as well as for load-carrying covering structures, are carried out in accordance with the current "Standards and Technical Conditions of Design of Wooden Structures" (N1TY 122-55). The author expresses his gratitude for valuable comments on the book to Candidates of Technical Sciences B.A. Osvenskiy, V.G. Pischikov, Yu. V. Slitskoukhov, and Ye. K. Ivanova, and also to the Head of the Wooden Structures Department of the Moscow Civil Engineering Institute, Candidate of Technical Sciences V.V. Bol'shakov. There are three appendixes, 131 figures, and 10 tables. There are no references.

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AVAILABLE: Library of Congress

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2-17-59

Card 5/5

IVANIN, Ivan Yakovlevich; GENIYEV, A.H., doktor tekhn. nauk, prof.,  
retsensent; SIMVULIDI, I.A., doktor tekhn. nauk, prof.,  
red.; MARTYMOV, A.P., red.

[Structural mechanics] Stroitel'naya mekhanika. Moskva,  
Vysshaya shkola, 1965. 430 p. (MIRA 18:1)

1. Zaveduyushchiy kafedroy soprotivleniya materialov Moskovskogo instituta stali (for Geniyev).



IVANIN, L.Ya., agronom

Efficient utilization of poor soils. Zemledelie 7 no.4:87-88  
Ap '59. (MIRA 12:6)

(Crimea--Agriculture)

NEPEDOV, A.A.; ROBOV, I.V.; SHAFRAN, I.M.; CHUDACHKO, A.M.; IVANIN, V.F.;  
KONYUSHUKO, A.S.

Investigating the regularities of butt shrinkage during the rolling  
of high shapes. Izv.vys.ucheb.zav.; Chern.Met. 8 no.8:89-93 '65.  
(MIRA 18:6)

1. Dnepropetrovskiy metallurgicheskiy zavod-VUZ.

NIKOLIN, A.V.; BELOV, A.P., kapitan-nastavnik; VARLAMOV, I.S., kapitan-nastavnik; KOSMACHEV, I.K., kapitan-nastavnik; SARATOV, V.F., kapitan-nastavnik; SEMONIN, M.I., kapitan-nastavnik; BEKMAN, A.A., kapitan; DRUZHININ, A.V., kapitan; IVANINA, B.F., kapitan; POLETAYEV, L.A., kapitan; VESHCHILOV, K.A.; VYKHODTSEV, P.K.; SMOLDYREV, A.Ye.; VERESHCHAGIN, Ya.A.; SUTYRIN, M.A.; SAVOSTIN, N.D.; FILYASOV, K.A.; GOLOVUSHKIN, M.P.; IVANOV, A.I.; FILYASOV, K.A., otv.za vypusk; ALEKSEYEV, V.I., red.izd-va; YERMAKOVA, T.T., tekhn.red.

[Rules of navigation on R.S.F.S.R. inland waterways] Pravila plavaniia po vnutrennim vodnym putiam RSFSR. Vvedeny v deistvie s 1 marta 1959 g. prikazom ministra rechnogo flota no.28 ot 11 fevralia 1959 g. Moskva, Izd-vo "Rechnoi transport," 1959. 124 p. (MIRA 13:6)

1. Russia (1917- R.S.F.S.R.) Ministerstvo rechnogo flota. 2. Glavnyy revizor po bezopasnosti sudokhodstva (for Nikolin). 3. Nachal'niki besseynovykh sudokhodnykh inspektsiy (for Veshchilov, Vykhodtsev, Smoldyrev). 4. Rabotniki Upravleniya glavnogo revizora po bezopasnosti sudokhodstva (for Vereshchagin, Sutyurin, Savostin, Filyasov). 5. Glavnoye upravleniye vodnykh putey i gidrotekhnicheskikh sooruzheniy (for Golovushkin).  
(Inland navigation--Laws and regulations)

IVANINA, L. I.

IVANINA4L8I8

600

1. GRUSHVITSKIY, I. V. ; IVANINA, L. I.

2a. USSR (600)

4. Biology - Exhibitions

7. For the popularization of Michurin's teachings; a new exhibition "The leading Michurin biology" in the museum of the Botanical Institute of V.L. Komarov, Academy of Sciences of the USSR. Bot.Zhur., 37, No. 1, 1952. Botanicheskiy Institut im. V.L. Komarova Akademii Nauk SSSR Leningrad red. 11 Oct. 1951.

9a. Monthly List of Russian Accessions, Library of Congress, April 1952. UNCLASSIFIED

IVANINA, L.I.

SATSYPEROV, F.A. [deceased]; DEM'YANETS, P.F.; ZABOLOTHAYA, Ye.S.;  
IVANINA, L.I.; LESKOV, A.I.; MAL'TSEVA, M.V.; TUROVA, A.D.,  
doktor meditsinskikh nauk, redaktor; ITSKOV, N.Ya., kandidat  
sel'skokhozyaystvennykh nauk, redaktor; ZHUKOV, G.I., redaktor;  
HEL'CHIKOVA, Yu.S., tekhnicheskiiy redaktor.

[Digitalis] Naperstianka. Pod red. N.IA.Itskova i A.D.Turovoi.  
Moskva, Gos.izd-vo med.lit-ry, 1954. 219 p. (MIRA 8:5)  
(Digitalis)

IVANINA, L.I.

New genus of Scrophulariaceae. Bot.mat.Gerb. 17:386-393 '55.

(MLHA 9:5)

(Figwort)

IVANINA, L. I.

The genus *Digitalis* L. (foxglove) and its practical use. Trudy Bot.  
inst.Ser.1 no.11:198-302 '55. (MIRA 9:7)  
(*Digitalis*)

IVANINA, L.I.; GRUSHVITSKIY, I.V.; ARKAD'YEV, G.V.; BUDKEVICH, Ye.V.;  
POLYANSKIY, V.I.

Setting up the museum exhibit "World vegetation according to the  
geobotanical regions." Bot.zhur. 41 no.5:667-680 My '56. (MIRA 10:7)  
(Phytogeography--Exhibitions)



IVANINA, L.I.

Second All-Union Conference on Problems in the Study and  
Utilization of Alpine Flora and Vegetation. Bot. zhur. 47  
no.6:908-913 Je '62. (MIRA 15:7)

1. Botanicheskiy institut imeni V.L. Komarova AN SSSR, Leningrad.  
(Alpine Flora--Congresses)

BOBROV, Ye.G.; BONDARTSEV, A.S.; BGRISOVA, A.G.; VASIL'KOV, B.P.;  
VASIL'CHENKO, I.T.; GOLUBKOVA, V.F.; GRUDZINSKAYA, I.A.;  
YEGOROVA, T.V.; ZINOVA, A.D.; IVANINA, L.I.; LEONOVA, T.G.;  
MATSENKO, A.Ye.; PIDOTTI, O.I.; POBEDIMOVA, Ye.G.; POLYAKOV,  
P.P.; POYARKOVA, A.I.; SAVICH, V.P.; SIN'KOVA, G.M.; SMIRNOVA,  
Z.N.; SMOL'YANINOVA, L.A.; FEDOROV, A.I.A.; KHARADZE, A.L.;  
TSVELEV, N.N.; SHISHKIN, B.K. [deceased]; PEN'KOVA, G.A., red.;  
BARANOVA, L.G., tekhn. red.; FRIDMAN, Z.L., tekhn. red.

[Botanical atlas] Botanicheskii atlas. Moskva, Sel'khozizdat,  
1963. 501 p. (MIRA 16:12)

1. Chlen-korrespondent AN SSSR (for Shishkin).  
(Botany—Atlases)

IVANINA, L.I.

Use of the carpological method in the classification of the family  
Gesneriaceae Dum. Bot. zhur. 50 no.1:29-43 Ja '65. (MIRA 18:3)

1. Botanicheskiy institut imeni Komarova AN SSSR, Leningrad.

TOLMACHEV, A.I.; IVANINA, L.I.

Phytogeographical excursion into the Ukrainian Carpathians.  
Bot. zhur. 50 no.3:451-456 Mr '65. (MIRA 18:5)

1. Leningradskiy gosudarstvennyy universitet imeni Zhdanova i  
Botanicheskiy institut imeni Komarova AN SSSR, Leningrad.

*IVANINA, T. F.*

USSR/Chemical Technology - Chemical Products and Their  
Application. Food Industry.

I-13

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2966

Author : Ivanina, T.F., Funtikova, V.I.

Inst : Moscow Technological Institute of the Meat and Dairy  
Industry

Title : Use of the Method of Tagged Atoms for Determining the  
Solubility of Tin in Milk and Dairy Products.

Orig Pub : Sb. stud. rabot Mosk. tekhnol. in-t myas. i moloch. prom-  
sti, 1956, No 4, 46-51

Abstract : Brass plates 1 cm<sup>2</sup> in size, coated with fused radioisotope  
of tin, were immersed in various dairy products (25 ml of  
each), namely: fresh milk, ~~whey~~ separated from cheese,  
cream, condensed milk with added sugar, and mented cheese  
(the cheese was cut in 1 cm<sup>3</sup> pieces which were placed on

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USSR/Chemical Technology - Chemical Products and Their  
Application. Food Industry.

I-13

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2966

the plates). Control media were distilled water and 0.1 N lactic acid. The plates were allowed to remain in the product for 3-4 days, at about 20°. The amount of tin that passed into the product was determined with a Geiger-Muller counter, at intervals of 4 hours during the first 24 hours and every 12 hours thereafter. Tin dissolves at a highest rate in melted cheese, less so in the whey and only very little in fresh milk. By the method of tagged atoms it is possible to determine 15 mg Sn in 1 liter of a solution.

Card 2/2

IVANIS, Aleksandr Nikolayevich; ZEL'TSMAN, L.N., red.

[Fisheries of the Far East] Rybnaia promyshlennost' Dal'nego Vostoka. Vladivostok, Primorskoe knizhnoe izd-vo, 1963. 145 p. (MIRA 17:10)

IVANISENKO, L.V.

Number of meteors in the Perseid shower of 1959. Bull.VAGO  
no.28:11-15 '60. (MIRA 14:6)

1. Moskovskoye otdeleniye Vsesoyuznogo astronomno-geodezicheskogo  
obshchestva.

(Meteors--August)



IVANISENKO, L.V. (Moskva)

Processing the basic photograph of a meteor. Biul.VAGO  
no.30:53-62 '62. (MIRA 15:8)

1. Moskovskoye otdeleniye Vsesoyuznogo astronomo-geodezicheskogo  
obshchestva, meteornyy otdel.  
(Meteors) (Astronomical photography)

IVANISENKO, L.V.

CY Aurigae. Per.zvezdy 14 no.1:60-61 Ja '62.

(MIRA 17:3)

1. Otdel peremennykh zvezd Moskovskogo otdeleniya Vsesoyuznogo  
astronomo-geodezicheskogo obshchestva, Moskva.

S/126/61/011/005/011/015  
EO73/E335

AUTHORS: Leont'yev, B.A. and Ivanisenko, T.I.

TITLE: On the Mechanism of Recrystallisation During Heating of Steel

PERIODICAL: Fizika metallov i metallovedeniye, 1961, Vol. 11, No. 5, pp. 746 - 751 + 1 plate

TEXT: The authors studied the process of recrystallisation during heating of the steels 60KhG (60KhG) and 5KhNV (5KhNV) of the following compositions (%)

	C	Mn	Si	S	P	Cr	Ni	W
60KhG	0.61	0.81	0.35	0.023	0.022	1.17	0.14	-
5KhNV	0.51	0.63	0.20	0.022	0.011	0.66	1.55	0.60.

For obtaining a clearly pronounced intragranular texture the specimens were preliminarily quenched from 1 200 - 1 250 °C and were then heated at a rate of 7 - 900 °C per hour to various temperatures and quenched again. The microstructure and appearance of the fracture were investigated and X-ray diffraction analysis was carried out. The austenite grain

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On the Mechanism of ....

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E073/E335

was exposed by etching quenched specimens in a saturated aqueous solution of picric acid, adding 0.5% "Novost" powder. X-ray investigation of the overheating texture was by back-reflection of polished coats using chromium radiation and focusing to the line (211) of the  $\alpha$ -phase. To obtain clear interference rings the X-ray diffraction studies were made on specimens that had been additionally tempered at 650 °C for one hour. Qualitatively equal results were obtained for both steels. In the case of heating speeds between 7 and 60 °C/hour, large austenite grains of

1.5 - 3.0 mm<sup>2</sup> and clearly apparent polyhedric boundaries were observed in the steel 60KhG which, prior to the investigations, was subjected to quenching and etching. Immediately after austenite formation, new centres appeared inside the grains, the grain boundaries became unequal with a character typical of the beginning of recrystallisation. The grains which form during recrystallisation grow at a greater speed and are large. On increasing the heating rate from

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On the Mechanism of ....

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7 to 60 °C/h the average size of the austenite grain, after recrystallisation, decreases (from 90 000 to 4 000  $\mu^2$ ) and the temperature of the end of the recrystallisation decreases (from 870 to 820 °C). The X-ray diffraction patterns of the material after recrystallisation show continuous thin rings, which indicate a destruction of the over-heating texture. If the heating rate is increased to the range 120 - 900 °C/h, the nature of the recrystallisation changes. After passing the critical point, fine austenitic grains form at the boundaries and inside the initial crystallites, which are usually distributed in groups with a given orientation but grains are also encountered with orientations differing from the general orientation of the other crystals. Increase in the heating rate leads to slight coarsening of the austenitic grain. In the case of heating at a rate of 180 °C/h in the range 800-850 °C, the speed of growth averaged 0.054  $\mu$ /min. The grain growth is accompanied by a decrease in the degree of perfection of the intra-granular texture which is conserved right up to 1 000 - 1 050 °C. ✓

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On the Mechanism of ....

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E073/E335

On reaching these temperatures the growth of austenite grains increases rapidly and no longer is any regularity observed in their orientation and traces of the original boundaries are completely blotted out. Thus, recrystallisation of the investigated steel takes place at 1 000 - 1 050 °C. The microstructure investigations are in good agreement with investigations of the fractures and with X-ray diffraction results. The investigations have shown that in the case of accelerated heating the recrystallisation temperature increases somewhat with increasing heating speed and increasing initial grain size; under otherwise equal conditions, this temperature is 25 - 50 °C higher for the Steel 5KhNV than it is for the steel 60KhG. The obtained results show that there is a difference in the mechanism of recrystallisation depending on whether the heating is slow (7 - 60 °C/h) or fast (120 - 900 °C/h). At low heating speeds the austenite is formed with a strict interrelation of the orientations of the  $\alpha$ -lattice in the

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On the Mechanism of ....

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E073/E335

$\gamma$ -phase so that austenite grains are obtained for which the size and the orientation coincide with the original size and orientation. At higher heating rates groups of fine, regularly-orientated austenite grains are formed within the boundaries of the original large crystallites. It is concluded that at increased heating speeds (120 - 900 °C/h) recrystallisation of the two investigated steels is due to selective recrystallisation in the austenite. There are 4 figures and 9 Soviet references.

ASSOCIATION: Zhdanovskiy metallurgicheskiy institut  
(Zhdanov Metallurgical Institute) ✓

SUBMITTED: August 24, 1960 (originally)  
November 19, 1960 (after revision)

Card 5/5

IVANISEVIC, B.

Case report on retroperitoneal tumor. Acta chir. iugosl. 1 no.4:  
385-389 1954.

1. Kirurška klinika Medicinskog fakulteta u Zagrebu (Predstojnik  
prof. dr. D. Juzbasic)

(MYOMA

retroperitoneal, surg.)

(PERITONEUM, neoplasms

fibromyoma, retroperitoneal, surg.)



IVANISEVIC, Boris, Dr.; CIGIN-SAIN, Sime, Dr.; CECUK, Ljubomir, Dr.

Congenital malignant mixed tumor of the kidney - Wilms tumor. Lijec  
vjes 82 no.11:857-864 '60.

1. Iz Kirurske klinike i Zavoda za kliniku rentgenologiju Medicinskog  
fakulteta Sveucilista u Zagrebu.

(NEPHROBLASTOMA in inf & child)

(KIDNEYS neopl)

VUKOVIC, Tihomir; IVANISEVIC, Branka

Existence of the two morphologically different populations of *Scardinius erythrophthalmus scardafa* (Bonaparte) in the lower stream of the Neretva River and in the Lake Scutari. God Biol inst Sar 15 no.1/2:137-140 '62

1. Prirodno-matematički fakultet i Biološki institut Univerziteta, Sarajevo.

IVANISHCHENKO, F. D.

USSR/Electricity  
Electric Power Plants  
Hydroelectric Power

Dec 48

"All-Union Conference of Directors of Construction and Installation  
Organizations of the Ministry of Electric Power Plants" 10pp

"Elek Stants" No 12

Reports conference held 1-3 Dec in Moscow at the Engineers and Technicians  
Club imeni Dzerzhinskiy to discuss results of capital construction  
in 1948 and plans for 1949. Reports conference speeches including  
those by A. I. Drobyshv, Dep Min of Elec Power Plants, N. M. Rogovin,  
Chief of Constr, Stalingrad Hydro Plant, C. B. Grobokopatel', Chief  
Engr, Moscow Power Trust, F. D. Ivanishchenko, Dir, Gen Power  
Installation Trust, and N. Ya. Tarasov, Dir, Northern Power Const Trust.

PA 54/49T26

IVANISHCHENKO, F. D.

AID P - 626

Subject : USSR/Electricity

Card 1/1 Pub. 27 - 30/35

Authors : Nekrasov, A. N., Syromyatnikov, I. A., Chilikin, M. G.,  
Solov'yev, I. I., Glazunov, A. A., Sirotinskiy, L. I.,  
Ivanishchenko, F. D., Venikov, V. A., Chetverichenko, A. N.  
and others.

Title : Professor A. M. Fedoseyev. On His 50th Birthday and  
25 years of Scientific, Educational and Engineering  
Activity. (Current News)

Periodical : Elektrichestvo, 8, 89, Ag 1954

Abstract : A short biographical sketch and a description of  
scientific activity is given.

Institution : Not given

Submitted : No date

IVANISECHENKO, F. D. and SMIRNOV, K.

"Development of the Single Power System in the USSR, its Role in the National Economy and Its Economic Index."

report presented at the 14th Sectional Meeting of the World Power Conference, Montreal, Canada, 7-12 Sep 58

8(6)

SOV/112-59-5-8504

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 5,  
pp 14-15 (USSR)

AUTHOR: Ivanishchenko. F. D.

TITLE: Activities of Teploelektroproyekt Institute

PERIODICAL: V sb.: Energ. str-vo SSSR za 40 let. M.-L., Gosenergoizdat,  
1958, pp 254-265

ABSTRACT: The scope of design work carried out by the Teploelektroproyekt Institute has grown 30 times from 1936 to 1957. The number of design engineers and technicians has grown from 1,917 to 9,971 in 1956. The Institute has as many as 13 branch offices now. By 1956, the following buildings and equipment were standardized: main power house buildings (7 types), coal-storage piles with traveling bridges, coal unloaders with blade-type feeders and car dumping, 2- and 4-block crushers, fuel-feed trestles, chemical water purification, generated-voltage switchgear assemblies, main control boards, enclosed 35- and 110-kv switchgear assemblies, 35-, 110-, and 220-kv outdoor

Card 1/2

SOV/112-59-5-8504

Activities of Teploelektroproyekt Institute

substations, fuel-oil and lubricating-oil systems, draft-towers, shore-type pumping stations, etc. Standardized and "recurrent" blueprints constituted 44% in 1951 and 52% in 1956 in designing individual power stations. A 1,200-Mw, 140-atm, 570°C steam power station is the predominating type of electric station for the Sixth Five-Year period. Built-up reinforced-concrete members for building constructions (frames, flooring and roofing trusses, walls, auxiliary foundations, underground structures) are being widely adopted. Superstructures are being provided for 12 power houses, some of them having 100-Mw, 300-atm, 650°C turbines. Blueprints have been made for a 300-Mw, 300-atm, 650°C turbine installation. A scheme of the United High-Voltage System, USSR, has been developed. A 2,400-Mw heating-and-electricity station is being planned with 600-Mw turbine units and with 1,700-ton/hr, 240-atm, 580°C boilers. High-power atomic power stations with various types of nuclear reactors are being designed. 400- and 500-kv AC transmission lines have been planned, as well as an 800-kv, 473-km DC line for transmitting 750,000 kw from the Stalingrad power station, Donbass.

Card 2/2

S.M.Sh.

IVANISHCHENKO, G. (g.Poltava); SHICHKIN, A. (g.Poltava)

Raw brick is fed into the kiln by a feed belt. Prom.koop. 14  
no.9:13 S '60. (MIRA 13:9)

1. Nachal'nik Konstruktorsko-tehnologicheskogo byuro oblpromsoвета  
(for Ivanishchenko). 2. Starshiy inzh.-tehnolog Konstruk-
- torsko-tehnologicheskogo byuro oblpromsoвета (for Shichkin).  
(Brickmaking machinery) (Conveying machinery)



IVANISHCHEV, V.M., inzh.; SEMENOV, L.A., inzh.

Synthesis of a logical control system for the operation of lock gates.  
Trudy LIVT no.64:50-59 '64. (MIRA 18:10)

IVANISHCHEV, P.

Change the established regulation of the difference in prices for  
livestock. Mias.ind.SSSR 31 no.2:41-42 '60. (MIRA 13:8)

1. Tambovskiy sovmarkhoz.  
(Cattle--Prices)

IVANISHCHEV, G., inzhener.

New type conveyor plant for reinforced concrete products. Stroim. mat.  
izdel. i konstr. 1 no.9:4-9 S'55. (MLRA 9:1)  
(Reinforced concrete)

IVANISHCHEV, G., inzhener.

Transfer car. Stroi.mat., izdel.1 konstr. 2 no.5:30 My '56.

(MLRA 9:8)

(Conveying machinery)

IVANISHCHEV, G.G., inzhener; KANTOROVICH, M.S., inzhener.

Pressing bushings without further processing. Stroil dor. mashino-  
str. 1 no.10:27-29 0 '56. (MLRA 9:11)  
(Machine-shop practice)

IVANISHCHEV, O.G., inzh.

Brief news. TSement 26 no.1:29-30 Ja-F '60.  
(MIRA 13:5)  
(Cement industries)

AREF'YEV, V.A., inzh.; IVANISHCHEV, G.G., inzh.

Brief news. TSement 26 no.3:31 My-Je '60. (MIRA 13:7)  
(Cement industry)

AUTHOR: Ivanishchev, I.G., Candidate of Technical Science.  
SOV/100-58-5-6/15  
Chaplygin A.S., Engineer.

TITLE: Increased Output of Multi-bucket Excavators. (O povyshenii effektivnosti mnogokovshovykh ekskavatorov).

PERIODICAL: Mekhanizatsiya Stroitel'stva, 1958, Nr 5, Pp 19-21.

ABSTRACT: Professor N.G. Dombrovskiy, Engineer G.N. Pokrovskiy and Candidate of Technical Science G.V. Rodionov designed a new multi-bucket unit with vertical action which is capable of breaking up the hard ground. Figure 1 shows one variant of this scheme illustrating rotary action of the excavator. Figure 2 indicates the way in which the breaking up of the ground is achieved. To estimate the effect of this new excavator a comparison is made between excavators ER-2 and ER-4. Formulae to obtain various constructional values for this excavator are given and explained. Figure 3 illustrates the phases of cutting and the positions of rotor. This machine can perform various excavations, e.g. levelling, trench digging, digging foundation holes, digging channels and excavating various non-ferrous materials. This excavator weighs only 17-19 tons, has a high efficiency, is easily transportable and does not depend on the local source of power. There are three figures.

1. Construction--Equipment

Card 1/1



IVANISHCHEV, I.G.; CHAPLYGIN, A.S.

New methods of improving rotary excavators. Izv.vys.ucheb.zav.; stroi. i  
arkhit. no.5:135-138 '58. (MIRA 12:1)

1. Voronezhskiy inzhenerno-stroitel'nyy institut.  
(Excavating machinery)

IVANISHCHEV, I.G., kand.tekhn.nauk CHAPLYGIN, A.S., inzh.

Increasing efficiency of multibucket excavators. Mekh. stroi. 15  
no.6:19-21 My '58. (MIRA 11:6)

(Excavating machinery)

VOLKOV, K.V., inzh.; IVANISHCHEV, I.G., kand.tekhn.nauk; SMIRNOV, S.F.  
kand.tekhn.nauk

"Hoisting and conveying construction elements equipment for  
plants producing" by A.E.Khlusov. Reviewed by K.V.Volkov, I.G.  
Ivanishchev, S.F.Smirnov. Stroitel.dor.mash. 7 no.2:38 F '62.  
(MIRA 15:5)

(Hoisting machinery) (Conveying machinery)  
(Building materials industry)  
(Khlusov, A.E.)

L 00743-67 ENT(1) GD/GW

ACC NR: AT6017663 (A)

SOURCE CODE: UR/0000/65/000/000/0143/0151

AUTHOR: Ivanishchev, V. P. (Engineer)

ORG: Institute of Hydroprojects imeni S. Ya. Zhuk (Institut gidroproyekt)

TITLE: The modern state of computations and research on the seismic stability of arched dams

SOURCE: Soveshchaniye po voprosam proyektirovaniya i stroitel'stva arochnykh plotin. Zugdidi, 1962. Arochnoye plotinostroyeniye (Arch dam construction); materialy soveshchaniya. Moscow, Izd-vo Energiya, 1965, 143-151

TOPIC TAGS: hydrodynamics, civil engineering, seismic modeling, earthquake, seismology, hydroelectric station

ABSTRACT: Some basic questions on the seismic strength of arched dams are considered. The article is divided into two parts, the first of which is a discussion of foreign (notably Japanese) technology in dam construction for seismic stability, and the second is devoted to the problem of computing the seismic stability of arched dams. The relative success of several small and large dams in the U.S., Japan, and China in withstanding earth tremors is cited, but the author notes that substantial historical data on dam stability for a wide range of earth shocks is lacking. The conventions used by several countries in computing earthquake design loads are reviewed, and the seismic coefficients for eleven Japanese dams are tabulated and cross-referenced with

Card 1/2

1 00713-07

ACC NR: AT6017663

the type and height of dam. Scale model studies ranging from scales of 1:75 to 1:300 are discussed with regard to their contributions toward computation of tolerable loads, safety factors, form effects, hydrodynamic pressures, etc, and model studies in ten countries are cited. Note is made of tests conducted in Japan wherein comparison is made of natural tremor data with data from model studies. Measurements of the dynamic vibration of the Kamishiba Dam (Japan) are reviewed, and vibration forms are plotted for varying frequencies of artificially induced vibrations. The author states the need for more comprehensive theoretical, full-scale and small-scale model studies of stress conditions in dams under earth tremor loads. Orig. art. has: 1 figure and 2 tables.

SUB CODE: 13,08/SUBM DATE: 29Sep65

Card 2/2 LC

SOKOLOV, B.N.; IVANISHEVA, V.G.

Eliminate defects in the continuous fermentation of sulfite waste liquor. Gidroliz. i lesokhim. prom. 10 no.6:26-27 '57. (MIRA 10:12)

1. Spirtovoy zavod Kaliningradskogo tsellyulozno-bumazhnogo kombi-  
nata No.1.

(Alcohol) (Sulfite liquor)

IVANISHIN, Anatoliy Ivanovich; TURUTIN, Yuriy Petrovich, dots.,  
kand. tekhn. nauk; STRILEVA, G.F., red.; PONOMAREVA, A.V.,  
tekhn. red.

[Vegetable gardening in Irkutsk Province] Ovoshchevodstvo v  
Irkutskoi oblasti. Irkutsk, Irkutskoe knizhnoe izd-vo,  
1963. 191 p. (MIRA 16:6)

1. Zaveduyushchiy kafedroy ovoshchevodstva sel'skokhozyay-  
stvennogo instituta, Irkutsk (for Ivanishin).  
(Irkutsk Province—Vegetable gardening)

BASTILEVICH, Ye.I.; IVANTSHIN, V.S.; PALINSKAYA, V.E.

Hydraulic fracturing in the Sitkov oil field. Neft. i gaz. prom.  
no.4:51-54 O-D '63. (MIRA 17:12)

1. Nauchno-issledovatel'skaya laboratoriya neftepromyslovogo uprav-  
leniya "Nadvornayaneft".



BERKOVSKIY V.S., inzh.; OSADCHIY, A.N., inzh. Prinimali uchastiye: STETSENKO,  
N.V.; LOBAREV, M.I.; AVRUNIN, P.M.; SHALIMOV, M.I.; IVANISHKIN, A.Ya.;  
OVECHKIN, V.I.; POVETKIN, G.I.; SHEVERDIN, V.I.

Grooving for the rolling of strip with acute angles. Stal' 23 no.7:  
627-631 JI '63. (MIRA 16:9)  
(Rolling (Metalwork)) (Rolls (Iron mills))

VASILEVICH, N.P.; IVANISHKIN, A.Ya.; LOBAREV, M.I.; OSADCHIY, A.N.

New technological processes for rolling KhVP steel.

Shor.rats.predl.vnedr.v proizv. no.1:23 '61.

(MIRA 14:7)

1. Zavod "Dneprospetsstal".

(Rolling 'Metalwork'))

IVANISHKIN, I.; TSYBANTSEV, N., navalokrepil'shchik; NISSEN, D., prokhodchik;  
~~PARKHULLIN, K.~~; KOLOKOL'TSEV, I., mashinist elektrovoza.

First steps. Mast. ugl. 7 no. 5:7-8 My '58.  
(Socialist competition)  
(Coal mines and mining)

(MIRA 11:?)

IVANOVICH, V.I.; RYAN, D.A.

Thermal measurements in high-pressure gas injection operations. Noft.  
1 gas.prom. no.1143-46 Jan-Mar '65. (MCRA 1818)

IVANISHKO, S.A., inzhener.

Welding the generator bed of a TE-3 diesel locomotive with the  
use of slag-covered electrodes. Svar.proizv. no.2:22-23 F '56.  
(MIRA 9:7)

1.Khar'kovskiy elektroyagovyy zavod.  
(Electric welding) (Diesel locomotives--Welding)

AID P - 4521

Subject : USSR/Engineering-Welding

Card 1/2 Pub. 107-a - 7/13

Author : Ivanishko, S. A.

Title : Resistance Slag Welding of Generator Frames of the TE-3 Diesel-Locomotive.

Periodical : Svar. proizv., 2, 22-23, F 1956

Abstract : The author deals with welding of a cylindrical frame of 1,400 mm in diameter, 830 mm high 65 mm thick, and made of the St.3 type steel. The Khar'kov Electric Locomotive Plant has found that resistance welding with slag as fusing agent is more efficient than automatic welding. The author describes the new method, which takes less time and provides additional savings in electric power and electrode wire. The A-372-M apparatus used for resistance welding is simple, reliable, and easy in operation. Six drawings.

AID P - 4521

Svar. proizv., 2, 22-23, F 1956

Card 2/2 Pub. 107-a - 7/13

Institution : Khar'kov Electric Locomotive Plant

Submitted : No date

IVANISHVILI, W.N.; BALINOV, I.M.

KU-2 shuttle-type mining machine unit. Ugol' Ukr. 4 no.10:34-35 0  
'60. (MIRA 13:10)

1. Nachal'nik shakhty "Talovskaya" No.1 tresta Krasnodonugol' (for  
Ivanishvili). 2. Glavnyy konstruktor shakhty "Talovskaya" No.1  
tresta Krasnodonugol' (for Balinov).  
(Coal mining machinery)



IVANISIN, D.

Servicing in the Maribor Automobile Factory. p. 27.

Periodical: STROJNISKI VESTNIK.

Vol. 5, no. 1, Jan. 1959.

TECHNOLOGY

SO: Monthly List of East European Accessions (EEAI) IC

Vol. 8, no. 4  
April 1959, Uncl.

FAYERSHTERN, Natan Davidovich; KATS, Mikhail L'vovich; IVANISOV, Aleksandr Ivanovich; POMAZKOV, N.S., prof., doktor ekonom.nauk, retsenzent; GRUNKIN, M.N., dotsent, kand.ekonom.nauk, red.; VARKOVETSKAYA, A.I., red.izd-va; SPERANSKAYA, O.V., tekhn.red.

[Method of planning and rules for accounting in industrial management without workshops; from the work practice of the Leningrad Building Machinery Plant] Planirovanie i normativnyi metod ucheta pri bestsekhovom upravlenii proizvodstvom; iz opyta raboty Leningradskogo zavoda stroitel'nykh mashin. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1960. 69 p. (MIRA 13:6)

(Leningrad--Building machinery industry--Accounting)

IVANISOV, V.

84-5-34/42

AUTHOR: Gabrovski, Todor (Sofia)  
[Translator from Bulgarian into Russian, V. Ivanisov]

TITLE: Decennium of Bulgarian Civil Aviation (Bolgarskoy grazhdanskoy aviatsii - desyat' let)

ABSTRACT: The first Bulgarian civil air route Sofia - Plovdiv - Burgas was established on May 12, 1947. The article reviews the achievements of Bulgarian civil aviation during this decennium (May 1947 - May 1957). The completion of the Vrazhdebna airport (Sofia) in 1948 speeded up this development. In 1949, the mixed Bulgarian-Soviet joint-stock company was established (abbreviated to TABSO) on a parity basis. In 1954, a new airport was built at Stara-Zagora. In the last year of existence of the mixed Bulgarian-Soviet Co. (presumably in 1955) the passenger traffic increased as compared with 1949 two and half times and cargo traffic 9 times. During this period, i.e. presumably 1947 - 1955, aviation has been used also to fight pests. Contracts were signed and regular flights initiated on the following routes: Sofia-Bucharest-Moscow, Sofia-Budapest-Prague-Berlin, and Sofia-Budapest-Warsaw. After the expiration of the Soviet-Bulgarian Co., the new all-Bulgarian civil aviation company retained the name TABSO. At present, the internal Bulgarian network comprises regular flights on seven routes, connecting Sofia, Plovdiv, Burgas, Varna, Gorna-Oryakhovitsa, and Stara-Zagora. In 1956, new contracts were signed

Card: 1/2

IVANISOV, V.S.

3538. IVANISOV, V.S. Vodyanoy Obogrev Teplits. Simferopol', Krymizdat, 1954.  
S Chert. 16sm (Krymskoye Obl. Upr. Sel'skogo Khozyaistva. Upr. s-kh. Propagandy)  
1,500ekz. Bespl.-(54-57633) P 631.544

SO: Knizhnaya Letopis', Vol.3, 1955

L 00007-66 EWT(d)/EWP(1) - IJP(c)  
ACCESSION NR: AR5008448

BC  
UR /0271/65/000/002/A042/A042  
621.398.623

40  
3

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika.  
Svodnyy tom, Abs. 2A258

AUTHOR: Volynskiy, A. N.; Ivanisova, L. N.; Yasnopol'skiy, V. V.

TITLE: Circuits for determining the error sign in digital servosystems

CITED SOURCE: Sb. Avtomatiz. prozv. protsessov v ugol'n. i gornorudn.  
prom-sti. Kiyev, 1964, 179-185

TOPIC TAGS: servosystem, digital servosystem, error sign determination

TRANSLATION: The development is reported of various error-sign-determining  
circuits intended to replace the set-signal-and-feedback-signal summators in the  
digital servosystem used for program control of rotor-type high-capacity  
excavators. The circuits compare preset and real coordinates expressed in a

Card 1/3

L 00007-66

ACCESSION NR: AR5008448

binary code. Tests have shown that the sign circuits can be constructed in the form of semiconductor-device potential-type logical switches. Thanks to the positional representation of the direct binary or direct binary-decimal code, the sign circuits have a homogeneous structure and can be composed from identical sections whose number is determined by the number of digits. The switching functions performed by the sign circuits are derived. The error sign is determined by the sign of the highest digit where a discrepancy occurs. A cyclic code is recommended for reducing the probability of incorrect reading. With this code, the number comparison can be accomplished directly in the cyclic code, without converting it into a direct binary code. A principal circuit of a semiconductor-device sign circuit for one cyclic triad is presented which realizes the switching functions for comparing the numbers represented in a 3-digit cyclic Gray code. The circuit operation is described. With a high number of digits, the cyclic and positional coding should be combined: the greatest groups of contiguous digits are represented by the cyclic code, while in each group, a circuit for direct comparison of cyclic-sequence sets is employed. The principal circuit is given,

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ACCESSION NR: AR5008448

as well as a joint circuit which performs the positional group-by-group comparison. The above sign circuits were successfully tested with conventional, nonmatched P202 transistors. The ratio of high to low potentials at the circuit outputs was 4 or higher. The use of the above sign circuits in digital servo-systems with relay-controlled servomotors permits constructing very simple systems for program control of electrical drives. Figs. 3.

SUB CODE: IE, DP

ENCL: 00

*mlr*  
Card 3/3

IVANITS'KA, O.S.

Possible points of departure for the second approximation  
of the "Law of interaction of space, time and motion of  
matter." Nauk. zap. Kiev. un. 13 no.7:39-54 '55. (MLRA 9:12)

(Relativity (Physics))



*BC*

*A-4*

(Reference of literature on) metabolic activity of heart cells of chick embryos cultivated in vitro at constant temp. A. F. LAMARCA  
Compt. rend. Acad. Sci. U.S.S.R., 1961, 22, 818-819. The authors  
study of heart cells grown in plasma from thyrotoxic animals  
is lower than that of cells grown in normal plasma. J. D. B.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

IVANITSKAYA, A. F.

"Mitotic Cell Activity as Studied by Explanation of the Chick Embryo Heart of Different Ages"

SOURCE: Dok. AN, 49, No 3, 1945

IVANITSKAYA, A. F.

*now - under review*  
Inst of Cytology, Histology and Embryology, Acad Sci USSR

"Influence of Homo- and Heteroplasm on Growth and Mitosis in Tissue Cultures in the Case of Prolonged Cultivation"

SOURCE: Dok. AN, 53, No 3, 1946

IVANITSKAYA, A. F.

B

34756

FA 34756

USSR/Medicine - Cells, Division Apr 1947  
Medicine - Embryology

"The Influence of Hypotonia in a Culture Medium of Epithelial Tissue of the Kidney of a Human Fetus on the Development and Progress of Mitosis," A. F. Ivanitskaya, 4 pp

"Doklady Akademii Nauk SSSR" Vol LVI, No 2

The influence of the osmotic pressure in a mixed solution was studied in connection with the work on the influence of hypotonia in cultures of kidney tissue from the human fetus and the spleen of the axolotl. The influence of hypotonia was demonstrated by a change in the cytological structure with a protrec-

ID

34756

USSR/Medicine - Cells, Division (Contd) Apr 1947

tion of mitosis, causing disruption and even complete cessation of mitosis.

PA 11T90

IVANITSKAYA, A. F.

USSR/Medicine - Mitosis  
Medicine - Hypotonicity

Apr 1947

"The Effect of Hypotonic Media Upon the Growth  
and Course of Mitosis in Tissue Culture of Hepatic  
Epithelium from a Human Embryo," A. F. Ivanitskaya,  
1 pp

"CR Acad Sci" Vol LVI, No 2

Study of variation in cell characteristics with vary-  
ing strengths of solution. Variation in nuclear size,  
vacuole formations and distribution of the various  
mitotic phases (pro-, meta-, ana- and telo-phases)  
for various strengths.

11T90

IVANITSKAYA, A. F.

" Effect of Pypotonic Media on the Growth and Progress of Mitosis in a Culture of Tissues  
Axolotl Spleen "

SOURCE: Dok. AN, 56, No 3, 1947

IVANITSKAYA, A.F.; KHEUSHCHOV, G.K., professor, zasluzhennyy deyatel' nauki, direktor.

Some blood cells of vertebrates under cultivation in different media.  
Arkh.anat.gist.i embr. 30 no.3:3-11 My-Je '53.

(MLRA 6:6)

1. Institut morfologii zhivotnykh imeni A.N. Severtsova Akademii nauk SSSR.  
(Blood--Corpuscles and platelets)

EXCERPTA MEDICA Sec.14 Vol.11/9 Radiology Sept 57.

1535. IVANITSKAYA A.F. \*The reactivity of some cell elements of axolotl upon the action of roentgen irradiation (Russian text) IZV. AKAD. NAUK SSSR (Mosk.) 1956. 5 (85-96) Graphs 1 Illus. 13 Axolotl specimens were submitted to X-ray irradiation, 500, 1000, 2000 and 4000 r., 180 kv., 30 ma., filter 0.5 Cu-0.75 Al, 40 r./min. From normal objects and irradiated ones cultures of the liver were made, the culture media containing serum from hens and extract from the spleen of axolotls. The phagocytic properties of cells were observed by cinematography. In preparations from the liver border the number of cells had decreased after 20 days following irradiation with 2000 r., also in cultures (37 days and 2000 r.). In the cells vacuoles, haemorrhages, pigmented cells, pyknosis, karyokinesis and fragmentation of the nucleus are seen and besides coarseness of the cytoplasm dispersion phase. These changes occurred in preparations made 37 and 48 days following the irradiation, 2000 r. The turgor is decreased. In the parenchyma cells almost the same changes were observed. In cultures, 44 days/2000 r., the cells in the culture media had almost disappeared, the leucocytes showed fragmentation, heterochromatosis and pyknosis of the nucleus. In other cells coarseness of the cytoplasm was seen, the brownian movements were at first quickened, afterwards slowed down. The life cycle was shortened from 4-5 to 1-2 days. Both in the cultures and preparations no mitoses were seen, often as early as the second day. The above mentioned changes are in general very marked.

Seuderling - Helsinki

*Inst. Animal Morphology in A. N. Severtsov  
Acad Sci USSR*



IVANITSKAYA, A. F.

"Reactivity of Cellular Elements of the Spleen of Mice to Ionizing Radiation on In Vitro Cultivation," by A. F. Ivanitskaya, Institute of Animal Morphology imeni A. N. Severtsova, Academy of Sciences USSR (director, G. K. Khrushchov, Corresponding Member, Academy of Sciences USSR), Arkhiy Anatomii, Gistologii, i Embriologii, Vol 33, No 3, Jul/Sep 56, pp 35-42

The purpose of this investigation was to study and to establish the nature of the cellular and tissue reaction resulting from the action of ionizing irradiation on an organism. For this purpose, mature white mice were subjected to a single total irradiation by X rays in doses of 5,000 and 500 roentgen.

Cultures of the spleen of irradiated mice showed a disturbance in the normal rhythm of development. This is evident in the onset of proliferation of the reticular stroma of the spleen on a dose of 5,000 roentgen, not in passed cultures (after 4-5 passages) as in the control, but as early as the second or third day following preparation of the culture.

Sum. 1360

LVANISHA, A. F.

On irradiation of the animals with 1,000 roentgen, there was a noticeable migration of the lymphoid and other motile elements in the cultures set up within 1 1/2 to 2 hours; at later periods, it decreases to zero. In the cultures of the spleen of irradiated animals set up soon after irradiation (in a dose of 500 roentgen within days and with a dose of 5,000 roentgen within hours) mitoses are completely lacking. Mitoses occur again in cultures set up at later periods following irradiation, but they have definite pathological features. (U)

Sum. 1360

89. X-Ray Effects on Spleen of Mice Differ Quantitatively and Qualitatively

"Study of X-Ray Effects on Spleen of Mice by Tissue Culture Method," by A. F. Ivanitskaya, Institute of Animal Morphology imeni A. N. Severtsov, Academy of Sciences USSR, Doklady Akademii Nauk SSSR, Vol 110, No 6, Oct 56, pp 978-981

The purpose of the present research was (1) to study the viability of the cells of reticular tissue after total irradiation of the animals, (2) to study the cytology of the various cellular elements composing the spleen, and (3) to explain the nature of the destructive processes.

White mice were subjected to a single total X-ray irradiation by lethal (500 r) and absolutely lethal (1,000 and 5,000 r) doses; then the viability of the tissue elements was determined by tissue culture.

Experimental results proved that a single total irradiation by 1,000 r and 5,000 r decreased the size of the spleen very markedly, but that the decrease in the size of the spleen caused by a 500 r dose was not as marked.

The migratory capacity of the spleen cells of mice at various periods after irradiation decreased rather abruptly and permanently after using 1,000 and 5,000 r, but it was gradually regained after using 500 r, and attained its normal level after 33 hours and exceeded it later on.

The above data indicate that radiation effects are essentially quantitative.

There were differences in the various cells of the spleen of irradiated animals. The lymphoid elements were injured first of all and lived for a short time only, while the cells of the reticular tissue preserved their viability for a long time. (U)